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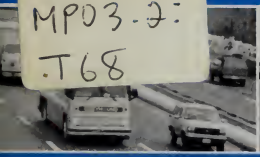

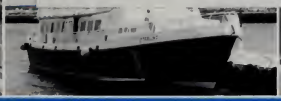

TRANSPORTATION FACTS

GOVERNMENT DOCUMENTS
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Transportation Facts

for the

Commonwealth of Massachusetts

May 1994

William F. Weld
Governor

Argeo Paul Cellucci
Lieutenant Governor

James J. Kerasiotes
Secretary
Executive Office of Transportation and Construction

Prepared by the
Central Transportation Planning Staff

William F. Weld
Governor

Argeo Paul Cellucci
Lieutenant Governor

Letter from the Secretary

Thank you for your interest in the transportation system of the Commonwealth of Massachusetts. This booklet of transportation facts is intended to provide you with an overview of our state's intermodal transportation system. It also provides telephone numbers to call for further information.

The transportation system described in this booklet is absolutely essential to the economic well-being of the Commonwealth and its citizens. The more smoothly the system functions, the more attractive Massachusetts becomes as a place to live and to do business.

The Executive Office of Transportation and Construction and its constituent agencies are working hard to make our system the best in the nation. Between now and the year 2000, we will invest over $10 billion on system renovation and expansion in the state. Some of the most significant projects are described briefly at the end of this booklet.

I hope you will find the information in this publication useful. By investing in our transportation infrastructure today, we ensure the economic growth of tomorrow.

Sincerely,

James J. Kerasiotes
Secretary

Introduction

Transportation Facts gives an overview of the extensive intermodal transportation network in the Commonwealth and its use. A series of maps is included to show the major components of the system. The Massachusetts Intermodal Transportation Network map, on pages 18 and 19, shows the state transportation system in a New England context.

This booklet has three sections. The first, *System Usage and Infrastructure*, presents information on use of the system and its physical characteristics. The second section, *Financing the System*, provides an overview of resources and expenditures related to building, maintaining, and operating the highway and transit components of the system. The last section, *Initiatives for the Future*, highlights the Executive Office of Transportation and Construction's efforts to implement a broad range of transportation system improvements throughout the Commonwealth.

TDD

This booklet lists a TDD (telecommunications device for the deaf) phone number where available. If a TDD number is not listed, communication through the statewide relay operator is available at 1-800-439-2370 (V/TTY).

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Journey-to-Work Statistics for Massachusetts Residents from the 1990 U.S. Census

The following U.S. census journey-to-work statistics show how Massachusetts residents commute to work in comparison to the nation as a whole.

Travel Mode	Total Mass. Workers	Massachusetts Percentage	National Percentage
Drive alone	2,150,200	72.2%	73.4%
Carpool (2-5 persons)	311,500	10.5	12.8
Walk	161,800	5.4	3.9
Subway/rapid transit	107,800	3.6	1.5
Bus	103,000	3.5	3.1
Work at home	74,800	2.5	3.0
Commuter rail	28,500	1.0	0.5
Bicycle	11,300	0.4	0.4
Vanpool (6+ persons)	6,500	0.2	0.5
Taxi	6,200	0.2	0.2
Ferry	1,900	0.1	0.0
Other	11,800	0.4	0.7
Total	**2,975,300**	**100.0%**	**100.0%**

For Massachusetts workers:

Median travel time to work by all modes	20.7 minutes
Average auto occupancy for work trips	1.14 people per auto

Highway Transportation

Highway Statistics: How Massachusetts Compares

In Massachusetts there are fewer automobiles per driver than in the nation as a whole. And on average, those automobiles are driven more miles and consume more fuel each year.

Auto Statistics per Motor Vehicle

	Massachusetts Average	National Average
Annual miles driven	12,381 miles	11,383 miles
Gallons of fuel used per year	744 gallons	706 gallons
Licensed drivers per vehicle	1.14 drivers	.89 drivers

Road Vehicles

In 1992 there were approximately 3.66 million vehicles registered in Massachusetts. Of the trucks registered in the state, over 85% are light-duty trucks (pickups and vans). By type, the numbers of vehicles registered in 1992 were as follows:

Automobiles	3,156,200
Trucks	496,600
Buses	10,600

Pavement Conditions

The Massachusetts Highway Department (MHD) monitors the condition of the state-maintained roadways. As of 1992, the pavement conditions of state-maintained roads were:

Excellent	Good	Fair	Poor
21.8%	38.1%	27.7%	12.4%

Bridge Conditions

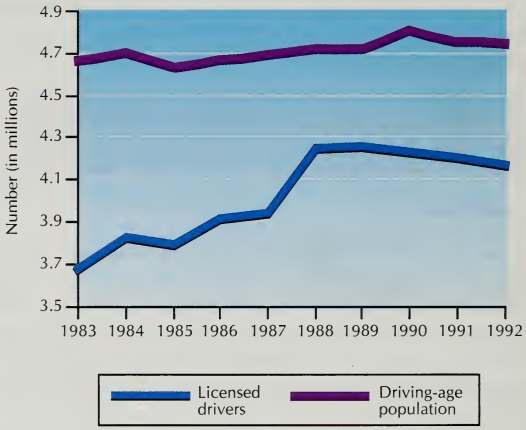
There are more than 5,000 bridges in Massachusetts under state or local authority. The table below shows the number that are under the control of each agency and the percentage that are to standard. Some fail to meet the standards because a portion of the bridge deck, pavement, or supporting structure is deficient. Others are considered substandard because they are functionally obsolete due to inadequate width, the condition of an approaching roadway, or the volume of traffic they now carry. Of the nearly 3,000 MHD bridges, about 28% are functionally obsolete and about 14% are structurally deficient. The balance, 58%, meet federal standards.

Responsibility	Number of Bridges	% Meeting Standards	% Obsolete Bridges	% Deficient Bridges
MHD	2,913	58%	28%	14%
Cities and towns	1,555	55	22	23
Turnpike Authority	350	63	36	1
MDC	104	48	30	22
MBTA	73	34	45	21
Other	42	43	45	12
STATEWIDE TOTAL	**5,037**	**57%**	**27%**	**16%**

Licensed Drivers

The number of licensed drivers in the state increased significantly from 1983 to 1992. The percentage of the driving-age population which had a license grew from 79% in 1983 to 88% in 1992. During this time, the driving-age population in Massachusetts grew at a slower rate than the population as a whole.

Licensed Drivers and Driving-Age Population in Massachusetts



Vehicle Miles of Travel

In 1992, the total vehicle miles travelled (VMT) in the Commonwealth was 47.35 billion miles of travel per year. This is a 17% increase in miles of travel over the 40.46 billion miles travelled in 1983.

Major Highways

Centerline Mileage and Lane Mileage

There are 34,323 miles of road, measured on the centerline, in the state. The majority of the roads in Massachusetts are controlled by local cities and towns. A more complete measure of roadway inventory is lane mileage, since many roads have more than one lane in each direction. Total lane mileage in the state is 72,261 miles. The top pie chart on page 11 shows percentage of lane mileage by roadway type.

Roadway Type	Centerline Miles	Percent of Total	Lane Miles	Percent of Total
Local	21,524	62.7%	43,048	59.6%
Collector	6,684	19.5	13,253	18.3
Arterial	5,274	15.4	11,682	16.2
Interstate	567	1.6	3,162	4.4
Other expressway	274	.8	1,116	1.5
Total	**34,323**	**100.0%**	**72,261**	**100.0%**

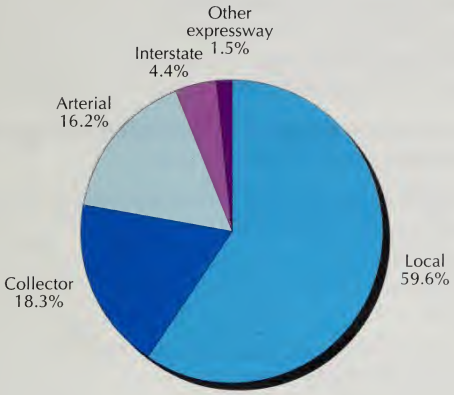
Travel by Roadway Type

As the pie charts on page 11 show, local and collector roads make up more than three-fourths of the lane mileage in Massachusetts but carry less than one-fourth of the miles travelled. Interstates and other expressways, in contrast, make up only 6% of the lane mileage but carry almost 37% of the travel.

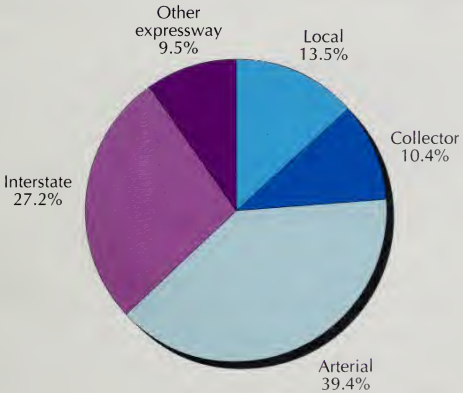
Roadway Type	Vehicle Miles of Travel*	Percent of Total
Local	6.378	13.5%
Collector	4.929	10.4
Arterial	18.642	39.4
Interstate	12.909	27.2
Other expressway	4.490	9.5
Total	**47.348**	**100.0%**

*Billions of miles per year, 1992.

Lane Mileage by Roadway Type (1992)



Travel by Roadway Type (1992)



For more information on the roadway network, contact:

Massachusetts Highway Department (MHD)
10 Park Plaza, Suite 3510
Boston, Massachusetts 02116
(617) 973-7800 TDD (617) 973-7306

Other state agencies and authorities with oversight of roadways and bridges in the Commonwealth are:

The Massachusetts Turnpike and the Sumner and Callahan Tunnels:
Massachusetts Turnpike Authority (MTA)
10 Park Plaza, Suite 5170
Boston, Massachusetts 02116
(617) 248-2800

The Tobin Memorial Bridge and Logan Airport access roads:
Massachusetts Port Authority (MPA)
10 Park Plaza, Suite 4160
Boston, Massachusetts 02116
(617) 973-5500 TDD (800) 831-1206

The parkways within the Boston metropolitan area:
Metropolitan District Commission (MDC)
20 Somerset Street
Boston, Massachusetts 02108
(617) 727-5250

The roadways within the state park system:
Department of Environmental Management (DEM)
100 Cambridge Street
Boston, Massachusetts 02202
(617) 727-3180

For local roadways, contact the appropriate city or town.

Public Transit

Public transit service for the Commonwealth is provided by the MBTA and fourteen regional transit authorities (RTAs). The RTAs' service consists of fixed-route and paratransit services. Together, the MBTA and the RTAs provide an average of 746,500 trips each weekday.

RTA Average 1992 Weekday Fixed-Route Ridership

	Avg. Weekday Ridership	Number of Buses
PVTA (Pioneer Valley)	41,450	212
WRTA (Worcester)	14,350	67
SRTA (Southeastern Mass.)	13,150	77
BAT (Brockton)	12,200	51
MVRTA (Merrimack Valley)	4,900	45
LRTA (Lowell)	4,550	35
BRTA (Berkshire)	2,550	19
MART (Montachusett)	2,550	28
GATRA (Attleboro-Taunton)	2,100	23
CATA (Cape Ann)	700	7
VTA (Martha's Vineyard)*	700	5
GMTA (Greenfield-Montague)	550	7
CCRTA (Cape Cod)	200	6
FRTA (Franklin)	50	5
Average weekday total	**100,000**	**587**

*Seasonal service.

Paratransit service is offered by each of the transit authorities to people with disabilities who cannot travel on conventional buses and trains. Generally, this consists of lift-equipped vans which provide door-to-door transportation service. The RIDE, the largest of the paratransit providers, is offered in 55 cities and towns in the MBTA's service district.

The MBTA System

The Massachusetts Bay Transportation Authority (MBTA) provides approximately 646,500 passenger trips per day in 130 cities and towns. The MBTA provides, in addition to bus and paratransit service, subway, light rail, commuter rail, and water ferry service. The ridership numbers in the following tables represent daily boardings for each of the lines. The sum of boardings is greater than the 646,500 figure because many people transfer between lines to make a complete trip.

MBTA Usage and Infrastructure

Rapid Transit & Bus

	Est. Daily Boardings	Number of Vehicles	Route Miles
Green Line	189,000	217	25.4
Red Line	185,000	220	20.5
Orange Line	127,000	120	11.2
Blue Line	54,000	70	5.9
Mattapan Trolley	7,000	15	2.6
MBTA bus	360,000	1,059	
The RIDE (paratransit)	1,450	110	
TOTAL	**923,450**		

Commuter Ferries

	Est. Daily Boardings
Hingham to Boston	2,100
Navy Yard to Long Wharf	600

MBTA RAPID TRANSIT SYSTEM

Commuter Rail

North Side Lines	Est. Daily Boardings	*Route Miles to:* North Station
Rockport	8,770	35.3
Ipswich Branch	1,460	27.7
Haverhill	6,600	32.9
Lowell	7,470	25.5
Fitchburg	6,650	49.5
South Side Lines		**South Station**
Attleboro	18,630	43.6
Stoughton Branch	2,990	18.8
Framingham	9,230	21.4
Needham	6,840	13.7
Franklin	13,070	30.8
Fairmount	1,460	9.1
TOTAL COMMUTER RAIL	**83,170**	

MBTA COMMUTER RAIL SYSTEM

For transit schedule or route information, call:

BRTA - Berkshire Regional Transit Authority
Pittsfield (413) 499-2782 TDD (413) 448-2108

BAT - Brockton Area Transit Authority
Brockton (508) 588-2240 TDD (508) 586-0009

CATA - Cape Ann Transportation Authority
Gloucester (508) 283-7916

CCRTA - Cape Cod Regional Transit Authority
Dennis (508) 385-8311 TDD (800) 385-7511

FRTA - Franklin Regional Transit Authority
Greenfield (413) 774-2262 (V/TDD)

GATRA - Greater Attleboro-Taunton Regional Transit Authority
Attleboro (508) 226-1102 TDD (508) 824-7439

GMTA - Greenfield-Montague Transportation Area
Greenfield (413) 774-5195 TDD (413) 774-2262

LRTA - Lowell Regional Transit Authority
Lowell (508) 459-0164 TDD (800) 439-2370

MBTA - Massachusetts Bay Transportation Authority
Boston (617) 722-3200 TDD (617) 722-5415

MVRTA - Merrimack Valley Regional Transit Authority
Haverhill (508) 373-1184 TDD (800) 244-2713

MART - Montachusett Regional Transit Authority
Fitchburg (508) 345-7711 TDD (800) 789-0577

NRTA - Nantucket Regional Transit Authority
Nantucket (508) 228-7237

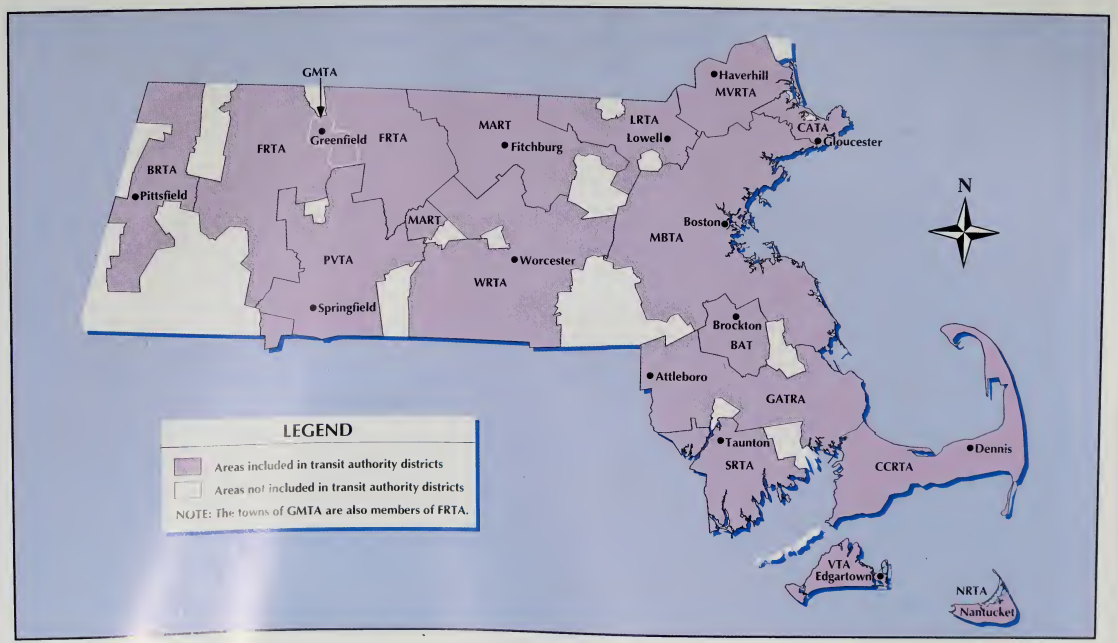
PVTA - Pioneer Valley Transit Authority
Springfield (413) 732-6248 TDD (800) 922-0178

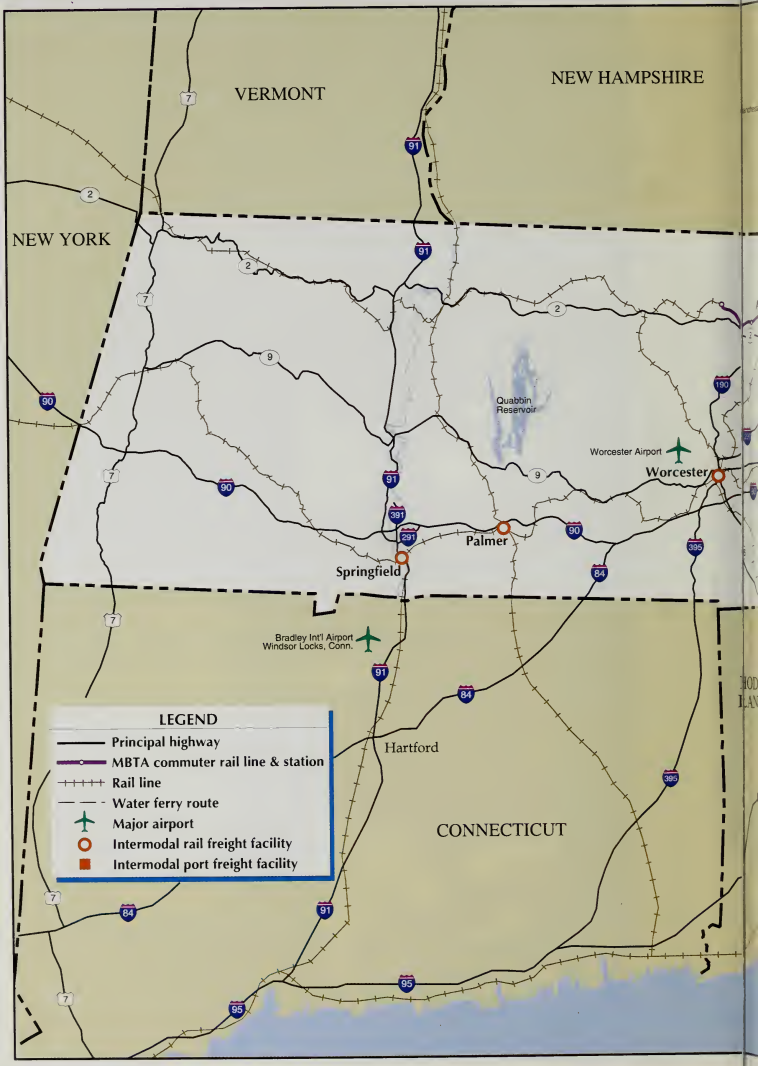
SRTA - Southeastern Regional Transit Authority
New Bedford (508) 997-6767 TDD (508) 999-5810

VTA - Martha's Vineyard Transit Authority
Edgartown (508) 627-9663 V/TDD (508) 693-4633

WRTA - Worcester Regional Transit Authority
Worcester (508) 791-2389 TDD (508) 791-6401

Transit Authorities




VERMONT
NEW HAMPSHIRE
NEW YORK
CONNECTICUT
Quabbin Reservoir
Worcester Airport
Worcester
Palmer
Springfield
Bradley Int'l Airport
Windsor Locks, Conn.
Hartford
LEGEND
Principal highway
MBTA commuter rail line & station
Rail line
Water ferry route
Major airport
Intermodal rail freight facility
Intermodal port freight facility

TRANSPORTATION NETWORK

Intercity Rail and Bus Passenger Services

Amtrak

Amtrak currently provides four year-round passenger services and one seasonal service in Massachusetts. The map on page 21 shows the routes and station stops. The services are:

- The Northeast Corridor via the Shore Line Route (to New York City and points south via Providence)
- The Northeast Corridor via the Inland Route (to New York City and points south via Springfield)
- The Lake Shore Limited (to Chicago)
- The Montrealer (to Vermont and Canada)
- The Cape Codder (seasonal service only)

Average boardings and alightings for Amtrak intercity rail passenger service at each year-round station are:

	Annual Ridership	Avg. Daily Ridership
Boston*	1,069,120	2,930
Springfield	153,550	420
Worcester	40,130	110
Framingham	8,480	20
Pittsfield	3,640	10
Amherst	3,470	10

*The Boston figure reflects total ridership at all three Boston-area stations: South Station, Back Bay, and Route 128.

Average summer weekend-day ridership on the Cape Codder: 190

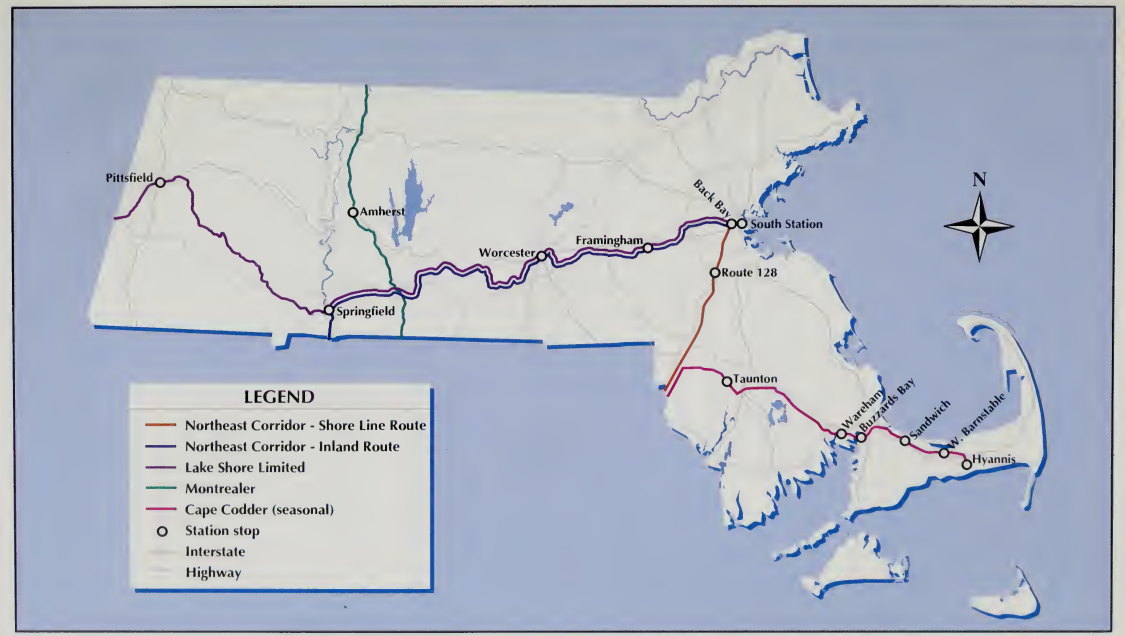
For further route and schedule information, call Amtrak: 1-800-872-7245 (1-800-USA-RAIL); TDD 1-800-523-6590.

Intercity Bus Passenger Services

The state is served by numerous private carriers providing intrastate and interstate bus passenger service.

For more information on intercity bus service by private carriers, call CARAVAN for Commuters at (617) 227-POOL.

Amtrak Service



Motor and Rail Freight Carriers

Motor Carrier Statistics

Of the approximately 500,000 trucks registered in Massachusetts, over 273,000 are used in commercial activities. In 1992, trucks transported over 106 million tons of manufactured freight to or from Massachusetts (approximately 82% of all manufactured freight movement).

For more information on motor freight carriers in Massachusetts, contact the Massachusetts Motor Transportation Association at (617) 270-6880.

Rail Freight Service

Ten rail freight carriers operate over 1,000 route miles throughout the Commonwealth, providing essential transportation connections in support of domestic and international trade. The map on page 23 shows the rail lines on which the freight carriers operate.

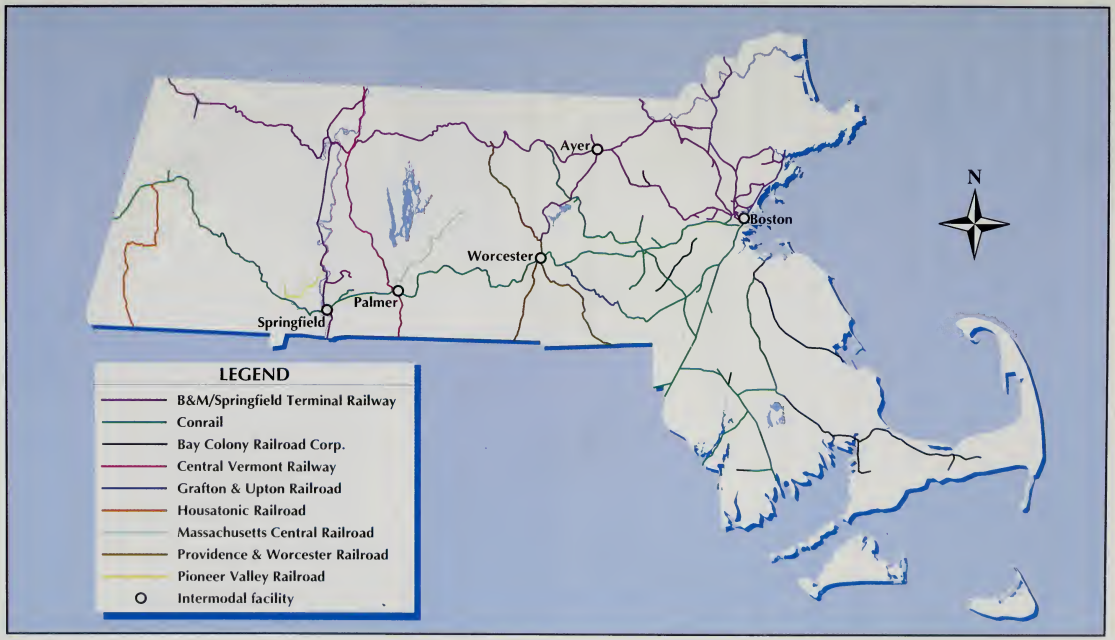
Mainline routes connect the state to Chicago and other points west and south, as well as to international services via the Port of Boston and West Coast ports. Intermodal service centers in Worcester, Springfield, Palmer, Ayer, and Boston (Moran Terminal and Beacon Park Yards) provide cost-effective container freight transfer and handling for a wide range of commodities.

The state's mainline, regional, and shortline railroads provide a variety of customer-driven benefits, including warehousing, transloading, and development services. The rail freight carriers serving Massachusetts are:

Class 1
Boston & Maine/Springfield Terminal Railway
Conrail

Classes 2 & 3
Bay Colony Railroad Corporation
Central Vermont Railway
Grafton & Upton Railroad
Housatonic Railroad
Massachusetts Central Railroad
Pioneer Valley Railroad
Providence & Worcester Railroad
Quincy Bay Terminal Railroad

Freight Rail Line Operations



Water Transportation

Massachusetts has numerous ports conducive to both freight and passenger activities. The extensive network of year-round and seasonal passenger service is shown on the maps below and on page 25 of the Massachusetts coastline and Boston Harbor. The most active ferry routes are those running to and from Martha's Vineyard, Nantucket, and the mainland, with annual ridership of approximately 2.5 million passengers.

Waterborne Freight Shipments

A number of Massachusetts seaports handle freight shipments. The bulk of this freight is petroleum for use throughout New England. The major ports handling freight shipments are (volumes shown in tons per year):

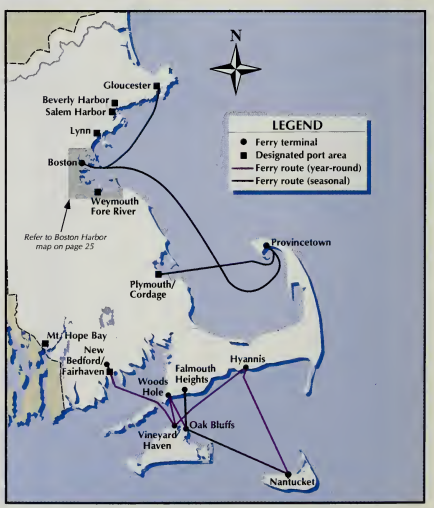
Port	Volume Handled	Main Commodities
Boston*	13,435,000	Petroleum, raw materials
Fall River	4,413,000	Coal, petroleum
Salem Harbor	1,466,000	Coal, petroleum
New Bedford & Fairhaven	406,000	Petroleum, fish
Woods Hole	208,000	Petroleum

*Includes Chelsea Creek, Mystic River, and Weymouth Fore River.

Ferry Service to Cape Cod and the Islands

For seasonal service to Cape Cod from Boston, contact Bay State Cruise Company at (617) 723-7800. Several operators provide ferry service to Martha's Vineyard and Nantucket. The primary carrier is the Steamship Authority (1-800-352-7144; TDD (508) 540-1394).

Water Passenger Service



Boston Harbor Ferries

Logan Airport to Boston (Rowes Wharf)

Airport Water Shuttle	(617) 330-8680

Charlestown Navy Yard to Boston (Long Wharf)

Boston Harbor Cruises	(617) 227-4321

Hingham to Boston (Rowes Wharf)

Massachusetts Bay Lines	(617) 542-8000
Boston Harbor Commuter Service	(617) 740-1253

Hull to Boston (Rowes Wharf)

Bay State Cruise Co.	(617) 723-7800

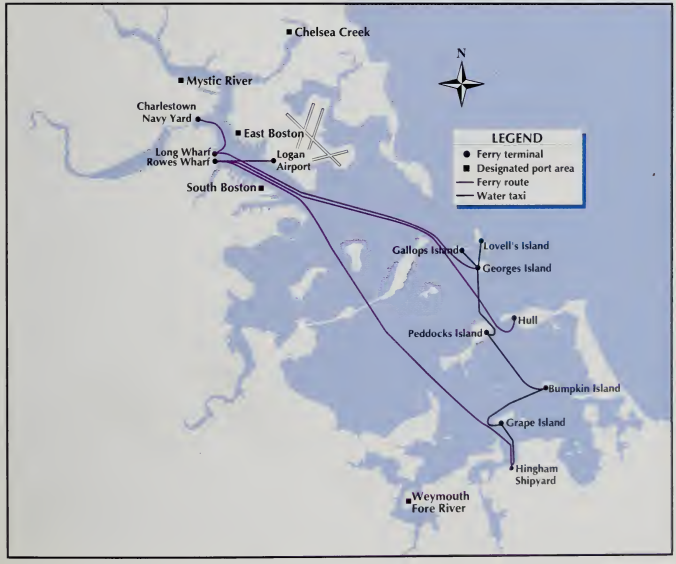
Boston (Long Wharf) to Georges Island

Bay State Cruise Co.	(617) 723-7800

Harbor Island Water Taxis

Dept. of Environmental Mgmt.	(617) 740-1605

Boston Harbor Passenger Service



Bicycle and Pedestrian Travel

According to the 1990 U.S. census, over 170,000 Massachusetts residents either walk or bicycle to work. In several Massachusetts cities and towns, including Amherst, Cambridge, and Provincetown, over 25% of all commuters either walk or bicycle to work.

The state has a number of long-distance and short-distance bicycle paths that serve both commuters and recreational riders. Although many of these are called "bicycle" paths, other users such as pedestrians, joggers, and roller skaters often outnumber the bicyclists. The Commonwealth's long-distance bicycle paths are listed on page 27. In addition to those listed, there are extensive systems of bicycle paths on the islands of Martha's Vineyard and Nantucket.

For Additional Information

For more information on bicycle and pedestrian options, call:
Bicycle and Pedestrian Coordinator
Bureau of Transportation Planning and Development, EOTC
(617) 973-7329

Additional information on bicycle options can be obtained from:
American Youth Hostels
(617) 731-5430

For more information on bicycle paths, call:
Department of Environmental Management
(617) 727-3180

For information on bicycle facilities within the MDC district, call:
Metropolitan District Commission
(617) 727-5250

Long-Distance Bicycle Facilities across the Commonwealth

Facility	Length	Location
Claire Saltonstall Bikeway	155.0 miles	Cape Cod Canal to Boston, Cape Cod Canal to Provincetown and Woods Hole
Cape Cod Rail Trail	20.0 miles	Dennis to Eastham (5.5-mile extension to open in fall of 1994)
Dr. Paul Dudley White Path	17.9 miles	Boston, Cambridge, Watertown, Newton
Minuteman Commuter Bikeway	11.1 miles	Bedford, Lexington, Arlington
Norwottuck Rail Trail	8.5 miles	Northampton, Hadley, Amherst

Extensive bicycle path systems are to be found on the islands of Martha's Vineyard and Nantucket.

Air Transportation

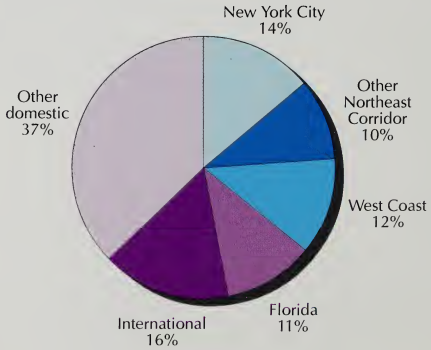
Massachusetts has a total of 173 airports (52 public and 121 private) that serve a variety of passenger and freight operations. The map on page 29 shows the state's major airports. Logan International Airport serves as the primary gateway for New England, accounting for over 61% of the air passenger boardings in the six-state region. In terms of passenger volume, Logan is the 10th-busiest airport in the U.S. and the 17th-busiest in the world. In 1993 it served over 24 million arriving and departing passengers.

Logan International Airport Activity

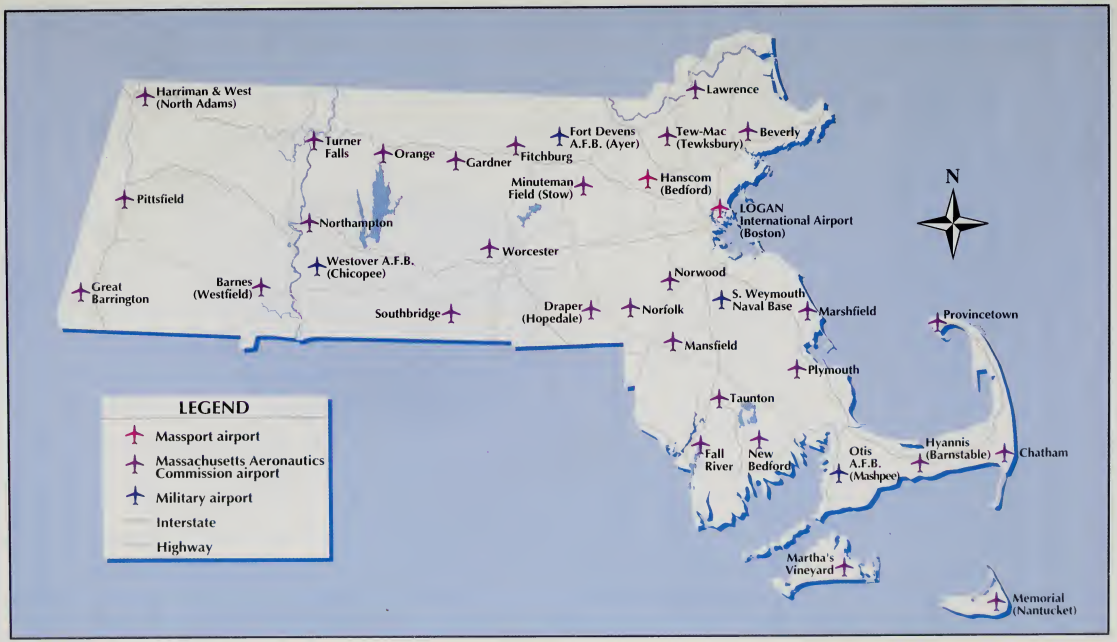
	Aircraft Operations	Airport Passengers	Cargo & Mail (tons)
Domestic	459,585	20,458,020	324,655
International	41,235	3,580,158	94,028
Total	**500,820**	**24,038,178**	**418,683**

The following chart represents the passenger destinations, both domestic and international, of air travelers using Logan Airport. Air travel to the Northeast Corridor comprises almost one quarter of all passenger trips.

Passenger Destinations from Logan Airport



Airports


Harriman & West (North Adams)
Pittsfield
Great Barrington
Barnes (Westfield)
Turner Falls
Northampton
Westover A.F.B. (Chicopee)
Orange
Gardner
Fitchburg
Fort Devens A.F.B. (Ayer)
Minuteman Field (Stow)
Worcester
Southbridge
Draper (Hopedale)
Lawrence
Tew-Mac (Tewksbury)
Beverly
Hanscom (Bedford)
LOGAN International Airport (Boston)
Norwood
Norfolk
S. Weymouth Naval Base
Marshfield
Mansfield
Plymouth
Taunton
Fall River
New Bedford
Otis A.F.B. (Mashpee)
Hyannis (Barnstable)
Chatham
Provincetown
Martha's Vineyard
Memorial (Nantucket)
N
LEGEND
Massport airport
Massachusetts Aeronautics Commission airport
Military airport
Interstate
Highway

Financing the System

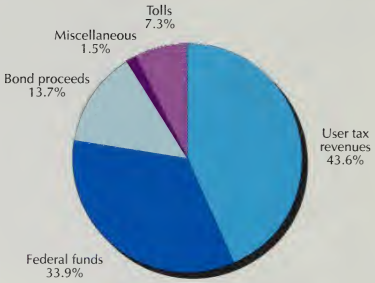
Highway Finances

Highway Receipts

Total highway receipts in 1992 for all governmental units (federal, state, local, and authorities) in Massachusetts exceeded $2 billion. The sources of this money are highway user fees such as fuel taxes, registration fees, and tolls, federal disbursements, and proceeds from bond sales.

User tax revenues	$884.4M	43.6%
Federal funds	686.9	33.9%
Bond proceeds	277.8	13.7%
Miscellaneous	30.3	1.5%
Tolls	148.6	7.3%
Total	**$2,028.0M**	
Less tolls	– 148.6	
Total (Less tolls)	**$1,879.4M**	

Highway-related Receipts in Massachusetts



The portion of these highway receipts that went into the Massachusetts Highway Fund, from fuel taxes and other highway user fees, totalled $797 million in 1992 (42% of the $1.879 billion total receipts, not including toll revenues). These funds were distributed as follows:

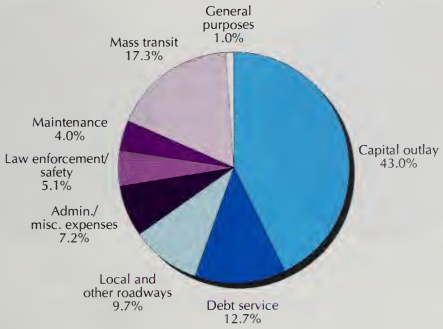
State highways	$508.6M	63.8%
Local roads	83.6	10.5
Mass transit	156.2	19.0
Administrative costs	37.1	4.7
General purposes	11.3	1.4
Total distributed	**$796.8M**	**100.0%**

Highway Disbursements

Excluding toll revenues, which are spent exclusively on toll roads, tunnels, and bridges, over $1.8 billion in highway receipts was disbursed in 1992. Over half of this money was spent on highway capital and maintenance outlays, while one-fourth was spent on highway operations and bond expenses. The remaining 18% was allocated for nonhighway use, most of it going to mass transit.

Capital outlay	$808.1M	43.0%
Debt service	239.4	12.7%
Local and other roadways	181.9	9.7%
Admin./misc. expenses	136.2	7.2%
Law enforcement/safety	95.2	5.1%
Maintenance	76.0	4.0%
Mass transit	324.4	17.3%
General purposes	18.2	1.0%
Total	**$1,879.4M**	

Disbursement of Highway-related Receipts

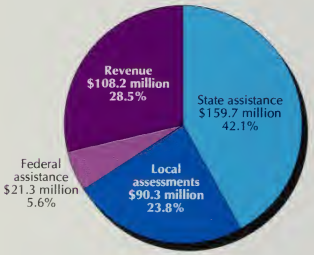


Public Transportation Finances

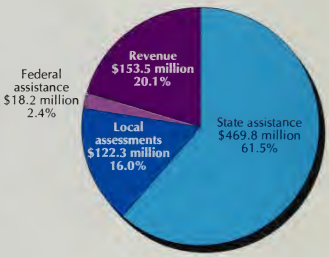
Funding the MBTA

The last decade has seen a dramatic shift in the funding structure of the MBTA. At a time when the share of federal operating assistance has declined, fare revenue has increased at a rate of just over 3% annually; with Proposition 2 1/2 limiting the growth of local assessments, the state has become the principal funding source for the agency. In calendar year (CY) 1993, the state contributed $469.8 million, or about 62% of the total MBTA operating budget, resulting in an annual growth rate of 11.4% from CY 1983 to CY 1993. With no restrictions on the state's share, its contribution rose from $159.7 million in CY 1983 to $469.8 million in CY 1993, as the proportions of other funding sources declined. The charts below illustrate the increased state support for the MBTA versus the decreased proportional support from the cities and towns for the period CY 1983 to CY 1993.

Funding of MBTA Operating Costs



CY 1983 Total: $379.5 million



CY 1993 Total: $763.8 million

Initiatives for the Future

Innovative Travel Programs in the Commonwealth

The Commonwealth supports numerous programs, such as those listed below, to enhance efficiency, encourage alternatives to travel by single-occupant vehicle, reduce congestion, and reduce auto-related pollution.

Since the passage of the Clean Air Act over two decades ago, the nation and Massachusetts have made significant strides in reducing air pollution. As a result of technological improvements during the 1980s, automobiles have become cleaner burning and pollute less. Between 1978 and 1985 Massachusetts had an average of 24 ozone-violation days each year. Between 1985 and 1993, the yearly average dropped to 14. Since 1990, the average has been 7 days per year. Contributing to this downward trend is the fact that motor vehicles have gotten cleaner.

However, in Massachusetts, motor vehicles are still responsible for approximately 61% of all carbon monoxide (CO), 40% of all nitrogen oxide (NOx), and 29% of all volatile organic compound (VOC) emissions on a summer day. In order to provide a healthier environment for its residents, Massachusetts has adopted a strategy of cleaner cars, better maintenance to keep all cars running efficiently, cleaner-burning fuels, and the provision of options for transit and high-occupancy use.

CARAVAN for Commuters, Inc.: 10 Park Plaza, Suite 2180, Boston, Massachusetts 02116; (617) 227-POOL. CARAVAN, Massachusetts' private-nonprofit commuter service company, provides comprehensive transportation services to commuters and their employers in order to facilitate transit and shared-ride alternatives.

Transportation Management Associations (TMAs): TMAs are private-nonprofit groups formed to facilitate private sector involvement in addressing transportation issues. At present there are seven TMAs (listed below) in operation in the Commonwealth. Contact CARAVAN for more information.

Back Bay Transportation Management Association
CommuteWorks/MASCO
Interinstitutional Transportation Management Association
MetroWest Transportation Management Association
North Suburban Transportation Management Association
Route 495 West Transportation Management Association
Route 128 Transportation Council

I-95 Coalition: Massachusetts is a member of the I-95 Coalition, which is developing standards for automatic toll cards for use on any toll facility along the Northeast Corridor from Maine to Virginia.

Electric Vehicle Pilot Program: Massachusetts has embarked on a pilot program in which electric vehicles will be used for commuting to transit facilities that are equipped with electric charging facilities.

SmarTraveler: This program, which is funded in part by the Massachusetts Highway Department (MHD), provides the general public with real-time information on travel conditions on the highway and transit systems of eastern Massachusetts. For information call (617) 374-1234.

***SP Program:** This program allows motorists to make a toll-free call from a cellular telephone to the State Police to report accidents or other highway incidents, facilitating a quick response.

Park-and-Ride Facilities: In an effort to increase carpooling and transit options, the various transportation agencies are pursuing an aggressive expansion of park-and-ride facilities across the state. To date, there are over 40,000 park-and-ride spaces in Massachusetts.

High-Occupancy-Vehicle (HOV) Lanes and HOV Priorities: The MHD is studying options for adding HOV lanes along congested interstate corridors. An HOV lane is currently in use on I-93 southbound, north of downtown Boston. The Massachusetts Turnpike offers a reduced-rate pass for HOV users and provides them with preferential toll booths.

IVHS (Intelligent Vehicle Highway Systems): IVHS technologies and services will enhance the efficiency and safety of the transportation system by providing information on travel conditions, routing, and safety.

Major Projects Proposed and Underway

Old Colony Railroad Rehabilitation Project

The restoration of three commuter rail lines (the Middleborough Line, the Plymouth Line, and the Greenbush Line) will restore service to 23 cities and towns in the South Shore area.

Central Artery/Third Harbor Tunnel

The Central Artery/Third Harbor Tunnel project will replace the 6-lane, elevated I-93 through downtown Boston with a new 8-to-10-lane roadway, mostly underground, and will extend the Massachusetts Turnpike (I-90) to Logan Airport via a new 4-lane tunnel under Boston Harbor.

Worcester Airport Renovations

Improvements to Worcester Airport will enhance its ability to serve as a regional center for air travel.

Expansion of Bicycle and Recreational Paths

The Commonwealth is embarking on an aggressive expansion of both commuter and multipurpose recreational facilities across the state.

Electrification and Extension of the Northeast Corridor by Amtrak

Full electrification of the Northeast Corridor will reduce rail travel time to New York City to three hours. Amtrak is also making plans for extension of service to Portland, Maine.

Route 146/Mass. Turnpike Interchange

This proposed new interchange will increase mobility in the Blackstone Valley and central Massachusetts.

North Station–South Station Rail Link

The Commonwealth is studying the feasibility of connecting North and South stations via an underground rail link. This would allow for the full integration of commuter rail service between the north and south.

Intermodal Transportation Center in Hyannis

This facility will link bus, cab, ferry, and air transportation in the Cape area.

Logan Airport Modernization Project

Massport is embarking on major reconstruction of airport facilities to improve passenger access and mobility.

Ongoing Roadway and Bridge Improvements

The Commonwealth is advertising over $400 million annually in roadway and bridge projects to maintain and enhance the existing highway infrastructure.

Additional copies are available from:

Executive Office of Transportation and Construction
State Transportation Building
10 Park Plaza, Suite 3170
Boston, Massachusetts 02116
(617) 973-7000
TDD (617) 973-7306

Sources

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- Department of Environmental Management
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- Federal Highway Administration, Office of Highway Information
- Federal Transit Administration
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- Massachusetts Highway Department
- Massachusetts Motor Transportation Association
- Massachusetts Turnpike Authority
- *Massachusetts Energy Plan*, Division of Energy Resources
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- MBTA Service Statistics, March 1994
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- *State Rail Plan*, 1989, EOTC
- U.S. Army Corps of Engineers, New England Division

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Robert A. Gillis
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